

SEQUENCE LISTING

<110> Bratzler, Robert L.
Petersen, Deanna M.

<120> Nucleic Acids for the Treatment of
Disorders Associated with Microorganisms

<130> C1037.70018US00

<150> not yet assigned
<151> 2003-09-19

<150> US 09/801,839
<151> 2001-03-08

<150> US 60/187,834
<151> 2000-03-08

<160> 135

<170> FastSEQ for Windows Version 3.0

<210> 1
<211> 15
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic Sequence

<400> 1
gctagacggt agcgt 15

<210> 2
<211> 15
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic Sequence

<400> 2
gctagatggt agcgt 15

<210> 3
<211> 15
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic Sequence

<400> 3
gctagacggt agcgt 15

<210> 4
<211> 15
<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Sequence

<400> 4
gctagacggtt agcgt 15

<210> 5
<211> 15
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic Sequence

<400> 5
gcatgacggtt gagct 15

<210> 6
<211> 20
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic Sequence

<400> 6
atggaaggctc cagcgttctc 20

<210> 7
<211> 20
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic Sequence

<400> 7
atcgactctc gagcgttctc 20

<210> 8
<211> 20
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic Sequence

<400> 8
atcgactctc gagcgttctc 20

<210> 9
<211> 20
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic Sequence

<400> 9
atcgactctc gagcgttctc 20
<210> 10
<211> 20
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic Sequence

<400> 10
atggaaggtc caacgttctc 20
<210> 11
<211> 20
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic Sequence

<400> 11
gagaacgctg gaccttccat 20
<210> 12
<211> 20
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic Sequence

<400> 12
gagaacgctc gaccttccat 20
<210> 13
<211> 20
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic Sequence

<400> 13
gagaacgctc gaccttcgat 20
<210> 14
<211> 20
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic Sequence

<400> 14
gagaacgctg gaccttccat 20

<210> 15
<211> 20
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic Sequence

<400> 15
gagaacgatg gaccttccat 20

<210> 16
<211> 20
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic Sequence

<400> 16
gagaacgctc cagcactgat 20

<210> 17
<211> 20
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic Sequence

<400> 17
tccatgtcgg tcctgatgct 20

<210> 18
<211> 20
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic Sequence

<400> 18
tccatgtcgg tcctgatgct 20

<210> 19
<211> 20
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic Sequence

<400> 19
tccatgacgt tcctgatgct 20

<210> 20
<211> 20
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic Sequence

<400> 20
tccatgtcgg tctgtgat 20

<210> 21
<211> 8
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic Sequence

<400> 21
tcaacgtt 8

<210> 22
<211> 8
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic Sequence

<400> 22
tcagcgct 8

<210> 23
<211> 8
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic Sequence

<400> 23
tcatcgat 8

<210> 24
<211> 8
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic Sequence

<400> 24
tcttcgaa 8

<210> 25
<211> 7
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic Sequence

<400> 25
caacggt 7

<210> 26
<211> 8
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic Sequence

<400> 26
ccaacggt 8

<210> 27
<211> 8
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic Sequence

<400> 27
aacgttct 8

<210> 28
<211> 8
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic Sequence

<400> 28
tcaacgtc 8

<210> 29
<211> 20
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic Sequence

<400> 29
atggactctc cagcgttctc 20

<210> 30
<211> 20

<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic Sequence

<400> 30
atggaaggctc caacgttctc 20

<210> 31
<211> 20
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic Sequence

<400> 31
atcgactctc gagcgttctc 20

<210> 32
<211> 20
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic Sequence

<400> 32
atggaggctc catcgttctc 20

<210> 33
<211> 20
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic Sequence

<400> 33
atcgactctc gagcgttctc 20

<210> 34
<211> 20
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic Sequence

<400> 34
atcgactctc gagcgttctc 20

<210> 35
<211> 20
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic Sequence

<400> 35
tccatgtcgg tcctgatgct 20

<210> 36
<211> 20
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic Sequence

<400> 36
tccatgccgg tcctgatgct 20

<210> 37
<211> 20
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic Sequence

<400> 37
tccatggcgg tcctgatgct 20

<210> 38
<211> 20
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic Sequence

<400> 38
tccatgacgg tcctgatgct 20

<210> 39
<211> 20
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic Sequence

<400> 39
tccatgtcga tcctgatgct 20

<210> 40
<211> 20
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic Sequence

<400> 40
tccatgtcgc tcctgatgct 20

<210> 41
<211> 20
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic Sequence

<400> 41
tccatgtcgt ccctgatgct 20

<210> 42
<211> 20
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic Sequence

<400> 42
tccatgacgt gcctgatgct 20

<210> 43
<211> 20
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic Sequence

<400> 43
tccataacgt tcctgatgct 20

<210> 44
<211> 20
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic Sequence

<400> 44
tccatgacgt ccctgatgct 20

<210> 45
<211> 20
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic Sequence

<400> 45 tccatcacgt gcctgatgct	20
<210> 46 <211> 19 <212> DNA <213> Artificial Sequence <220> <223> Synthetic Sequence	
<400> 46 ggggtcaacg ttgacggg	19
<210> 47 <211> 19 <212> DNA <213> Artificial Sequence <220> <223> Synthetic Sequence	
<400> 47 ggggtcagtc gtgacggg	19
<210> 48 <211> 15 <212> DNA <213> Artificial Sequence <220> <223> Synthetic Sequence	
<400> 48 gctagacgtt agtgt	15
<210> 49 <211> 20 <212> DNA <213> Artificial Sequence <220> <223> Synthetic Sequence	
<400> 49 tccatgtcgt tcctgatgct	20
<210> 50 <211> 24 <212> DNA <213> Artificial Sequence <220> <223> Synthetic Sequence	
<400> 50 accatggacg atctgtttcc cctc	24

<210> 51
<211> 18
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic Sequence

<400> 51
tctcccagcg tgcgccat 18

<210> 52
<211> 24
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic Sequence

<400> 52
accatggacg aactgtttcc cctc 24

<210> 53
<211> 24
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic Sequence

<400> 53
accatggacg agctgtttcc cctc 24

<210> 54
<211> 24
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic Sequence

<400> 54
accatggacg acctgtttcc cctc 24

<210> 55
<211> 24
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic Sequence

<400> 55
accatggacg tactgtttcc cctc 24

<210> 56
<211> 24

<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic Sequence

<400> 56
accatggacg gtctgtttcc cctc 24

<210> 57
<211> 24
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic Sequence

<400> 57
accatggacg ttctgtttcc cctc 24

<210> 58
<211> 15
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic Sequence

<400> 58
cacgttgagg ggcac 15

<210> 59
<211> 12
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic Sequence

<400> 59
tcagcgtgcg cc 12

<210> 60
<211> 17
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic Sequence

<400> 60
atgacgttcc tgacgtt 17

<210> 61
<211> 17
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic Sequence

<400> 61
tctcccagcg ggcgcat 17

<210> 62
<211> 20
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic Sequence

<400> 62
tccatgtcgt tcctgtcgtt 20

<210> 63
<211> 20
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic Sequence

<400> 63
tccatagcgt tcctagcgtt 20

<210> 64
<211> 21
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic Sequence

<400> 64
tcgtcgtgt ctccccttct t 21

<210> 65
<211> 19
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic Sequence

<400> 65
tcctgacgtt cctgacgtt 19

<210> 66
<211> 19
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic Sequence

<400> 66
tcctgtcgtt cctgtcgtt 19

<210> 67
<211> 20
<212> DNA
<213> Artificial Sequence
<220>

<223> Synthetic Sequence

<400> 67
tccatgtcgt ttttgcgtt 20

<210> 68
<211> 20
<212> DNA
<213> Artificial Sequence
<220>

<223> Synthetic Sequence

<400> 68
tcctgtcgtt cctgtcgtt 20

<210> 69
<211> 20
<212> DNA
<213> Artificial Sequence
<220>

<223> Synthetic Sequence

<400> 69
tccttgcgt tcctgtcgtt 20

<210> 70
<211> 20
<212> DNA
<213> Artificial Sequence
<220>

<223> Synthetic Sequence

<400> 70
tcctgtcgtt ttttgcgtt 20

<210> 71
<211> 21
<212> DNA
<213> Artificial Sequence
<220>

<223> Synthetic Sequence

<400> 71
tcgtcgtgt ctgcccttct t 21

<210> 72
<211> 21
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic Sequence

<400> 72
tcgtcgtgt tgcgtttct t 21

<210> 73
<211> 20
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic Sequence

<400> 73
tccatgcgtg cgtgcgtttt 20

<210> 74
<211> 20
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic Sequence

<400> 74
tccatgcgtt gcgttgcggt 20

<210> 75
<211> 20
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic Sequence

<400> 75
tccacgacgt tttcgacgtt 20

<210> 76
<211> 20
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic Sequence

<400> 76
tcgtcgttgt cggtgctggt 20

<210> 77
 <211> 24
 <212> DNA
 <213> Artificial Sequence

 <220>

 <223> Synthetic Sequence

 <400> 77
 tcgtcgtttt gtcgttttgt cggt 24

 <210> 78
 <211> 22
 <212> DNA
 <213> Artificial Sequence

 <220>

 <223> Synthetic Sequence

 <400> 78
 tcgtcgttgt cgttttgtcg tt 22

 <210> 79
 <211> 21
 <212> DNA
 <213> Artificial Sequence

 <220>

 <223> Synthetic Sequence

 <400> 79
 gcgtgcgttg tcgtgtcgt t 21

 <210> 80
 <211> 21
 <212> DNA
 <213> Artificial Sequence

 <220>

 <223> Synthetic Sequence

 <400> 80
 tgtcgtttgt cgtttgtcgt t 21

 <210> 81
 <211> 25
 <212> DNA
 <213> Artificial Sequence

 <220>

 <223> Synthetic Sequence

 <400> 81
 tgtcgttgtc gttgtcgttg tcgtt 25

 <210> 82
 <211> 19

<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic Sequence

<400> 82
tgtcggtgtc gttgtcggt 19

<210> 83
<211> 14
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic Sequence

<400> 83
tcgtcgtcgt cggt 14

<210> 84
<211> 13
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic Sequence

<400> 84
tgtcgttgtc gtt 13

<210> 85
<211> 20
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic Sequence

<400> 85
tccatagcgt tcctagcgt 20

<210> 86
<211> 20
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic Sequence

<400> 86
tccatgacgt tcctgacgt 20

<210> 87
<211> 6
<212> DNA
<213> Artificial Sequence

<220>	
<223> Synthetic Sequence	
<400> 87	
gtcgyt	6
<210> 88	
<211> 7	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Synthetic Sequence	
<400> 88	
tgtcgyt	7
<210> 89	
<211> 18	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Synthetic Sequence	
<400> 89	
agctatgacg ttccaagg	18
<210> 90	
<211> 20	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Synthetic Sequence	
<400> 90	
tccatgacgt tcctgacgtt	20
<210> 91	
<211> 20	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Synthetic Sequence	
<400> 91	
atcgactctc gaacgttctc	20
<210> 92	
<211> 20	
<212> DNA	
<213> Artificial Sequence	
<220>	

<223> Synthetic Sequence

<400> 92
tccatgtcgg tcctgacgca 20

<210> 93
<211> 8
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic Sequence

<400> 93
tcttcgat 8

<210> 94
<211> 20
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic Sequence

<400> 94
ataggagggtc caacgttctc 20

<210> 95
<211> 15
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic Sequence

<400> 95
gctagagggg agggg 15

<210> 96
<211> 15
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic Sequence

<400> 96
gctagatgtt agggg 15

<210> 97
<211> 15
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic Sequence

<400> 97 gctagagggg aggggt	15
<210> 98 <211> 15 <212> DNA <213> Artificial Sequence	
<220>	
<223> Synthetic Sequence	
<400> 98 gctagagggg aggggt	15
<210> 99 <211> 15 <212> DNA <213> Artificial Sequence	
<220>	
<223> Synthetic Sequence	
<400> 99 gcatgagggg gagct	15
<210> 100 <211> 20 <212> DNA <213> Artificial Sequence	
<220>	
<223> Synthetic Sequence	
<400> 100 atggaaggctc cagggggctc	20
<210> 101 <211> 20 <212> DNA <213> Artificial Sequence	
<220>	
<223> Synthetic Sequence	
<400> 101 atggactctg gagggggctc	20
<210> 102 <211> 20 <212> DNA <213> Artificial Sequence	
<220>	
<223> Synthetic Sequence	
<400> 102 atggactctg gagggggctc	20

<210> 103
<211> 20
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic Sequence

<400> 103
atggactctg gagggggctc 20

<210> 104
<211> 20
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic Sequence

<400> 104
atggaaggctc caaggggctc 20

<210> 105
<211> 20
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic Sequence

<400> 105
gagaaggggg gaccttccat 20

<210> 106
<211> 20
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic Sequence

<400> 106
gagaaggggg gaccttccat 20

<210> 107
<211> 20
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic Sequence

<400> 107
gagaaggggg gaccttgat 20

<210> 108
<211> 20

<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Synthetic Sequence	
<400> 108	
gagaaggggg gaccttccat	20
<210> 109	
<211> 20	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Synthetic Sequence	
<400> 109	
gagaaggggg gaccttccat	20
<210> 110	
<211> 20	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Synthetic Sequence	
<400> 110	
gagaaggggc cagcactgat	20
<210> 111	
<211> 20	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Synthetic Sequence	
<400> 111	
tccatgtggg gcctgatgct	20
<210> 112	
<211> 20	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Synthetic Sequence	
<400> 112	
tccatgtggg gcctgatgct	20
<210> 113	
<211> 20	
<212> DNA	
<213> Artificial Sequence	

<220>

<223> Synthetic Sequence

<400> 113
tccatgaggg gcctgatgct 20

<210> 114
<211> 20
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic Sequence

<400> 114
tccatgtggg gcctgctgat 20

<210> 115
<211> 20
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic Sequence

<400> 115
atggactctc cggggttctc 20

<210> 116
<211> 20
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic Sequence

<400> 116
atggaaggtc cggggttctc 20

<210> 117
<211> 20
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic Sequence

<400> 117
atggactctg gaggggtctc 20

<210> 118
<211> 20
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic Sequence

<400> 118
atggaggctc catggggctc 20

<210> 119
<211> 20
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic Sequence

<400> 119
atggactctg gggggttctc 20

<210> 120
<211> 20
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic Sequence

<400> 120
atggactctg gggggttctc 20

<210> 121
<211> 20
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic Sequence

<400> 121
tccatgtggg tgggatgct 20

<210> 122
<211> 20
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic Sequence

<400> 122
tccatgcggg tgggatgct 20

<210> 123
<211> 20
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic Sequence

<400> 123 tccatggggg tcctgatgct	20
<210> 124	
<211> 20	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Synthetic Sequence	
<400> 124 tccatggggg tcctgatgct	20
<210> 125	
<211> 20	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Synthetic Sequence	
<400> 125 tccatgtggg gcctgatgct	20
<210> 126	
<211> 20	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Synthetic Sequence	
<400> 126 tccatgtggg gcctgatgct	20
<210> 127	
<211> 20	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Synthetic Sequence	
<400> 127 tccatggggg ccctgatgct	20
<210> 128	
<211> 20	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Synthetic Sequence	
<400> 128 tccatggggg gcctgatgct	20

<210> 129
<211> 20
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic Sequence

<400> 129
tccatggggg tcctgatgct 20

<210> 130
<211> 20
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic Sequence

<400> 130
tccatggggg ccctgatgct 20

<210> 131
<211> 20
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic Sequence

<400> 131
tccatggggg gcctgatgct 20

<210> 132
<211> 14
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic Sequence

<400> 132
gctagaggga gtgt 14

<210> 133
<211> 20
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic Sequence

<400> 133
gggggggggg gggggggggg 20

<210> 134
<211> 11

<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic Sequence

<220>
<221> misc_feature
<222> (4)..(4)
<223> n = 0-20 nucleotides each of which may be a, c, g or t

<220>
<221> misc_feature
<222> (8)..(8)
<223> n = 0-20 nucleotides each of which may be a, c, g or t

<400> 134
gggngggngg g 11

<210> 135
<211> 10
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic Sequence

<220>
<221> misc_feature
<222> (3)..(3)
<223> n = 0-50 nucleotides each of which may be a, c, g or t

<220>
<221> misc_feature
<222> (5)..(6)
<223> n = nucleotides which may be gpt, gpg, gpa, apa, apt, apg,
cpt, cpa, cpg, tpa, tpt, or tpg

<220>
<221> misc_feature
<222> (9)..(10)
<223> n = nucleotides which may be tpt, apt, tpg, apg, cpg, tpc,
apc, cpc, tpa, apa, or cpa

<400> 135
tcntnncggn 10